MSD
Metropolitan Sewer District

Louisville and Jefferson County Metropolitan Sewer District
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Louisville Kentucky 40203-1911
502-540-6000
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August 4, 2011

Mr. Femi Akindele
Remedial Project Manager
Kentucky/Tennessee Section
U.S. Environmental Protection Agency Region IV
61 Forsyth Street
Atlanta, GA 30303

Re: Result of Air Quality Monitoring - FY 11, Fourth Quarter (FY11-4Q), Lees Lane Superfund Site, Jefferson County, Kentucky, Administrative Order on Consent, USEPA Docket No-91-32-C

Dear Mr. Akindele:

In accordance with paragraph 11, under Reporting Requirements, of the subject Consent Order and Attachment 1, Operation and Maintenance Plan For Post-Removal Site Control at the Lee's Lane Landfill Site. Section 4.2, Air Quality Monitoring, attached for your information and files is one photocopy each of the following items, prepared by URS Corporation, 1600 Perimeter Park Drive, Suite 100, Morrisville, North Carolina 27560.

1. URS Corporation letters dated June 22, 2011, 2 pages.
2. Figure 1, Lees' Lane Landfill, Sampling Locations, 1page.
3. Table 1, TO-15 Data Summary for Ambient Air Samples at the Lees' Lane Landfill, Sampling date: April 28, 2011, 1 page.
4. Table 2, On-Site Meteorological Data, Sampling date, April 28, 2011, 1 page.
5. Table 3, TO-15 Data Summary for Gas Monitoring Well Samples at the Lees' Lane Landfill, Sampling date: April 28, 2011, 1 page.
6. Figure 2. Graphic Display for Gas Monitoring Well Samples for Methane.

Please advise if you have any questions concerning the attached information.

Sincerely,

Richard H. Watkins, Sr.
Sewer Maintenance Supervisor

RHW/rw
Lees-11-4Qtr

Enc.

cc: Kentucky National Resource Environment Protection Cabinet
Mr. Daniel Phelps, Division of Waste Management
H. J. Schardein, Jr., Executive Director
Tony Marconi, I&FP Preventive Maintenance & Support Manager
Lee Lane File

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41917084.00100

June 22, 2011

Mr. Rick Watkins
Louisville Metropolitan Sewer District
3050 Commerce Center Place
Louisville, KY 40211

Dear Rick:

Enclosed is the summary analytical report for the ambient air and gas monitoring well samples collected at the Lee's Lane Landfill site on April 28, 2011(Sampling Event 49). Six ambient samples, along with nine (G1, G2, G3, G4, G5R, G5L, GMW-1, GMW-2, GMW-3) well samples and a field blank were taken.

A map of the site, labeled with the sample collection locations for your reference, is shown in Figure 1. Table 1 is a tabular summary of the ambient samples with the primary analytes required for submission to EPA. Benzene, methylene chloride, toluene, and xylenes were detected in small quantities in select ambient samples. Vinyl chloride was detected in small quantities in wells G1, G3 and G4, and methane concentrations were consistent with historical data.

The sampling locations were chosen based on a combination of prevailing on-site meteorology and accessible sites in the adjacent residential neighborhood per the standard sampling protocol. The meteorological conditions were moderate throughout the sampling day; cool (48-68 ^{O}F), with moderate variable winds. The information displayed in Table 2 was obtained from the Louisville International Airport (Standiford Field) National Weather Service Station. The ambient air samples were collected in Summa canisters positioned 3-5 feet above ground level, integrated over an approximate 7-hour collection period.

The methane analysis was performed by GC/FID using a separate analytical system from the TO-15 analysis employed at STL in Austin. The TO-15 analytical methodology using Gas Chromatography/Mass Spectrometry (GC/MS) was employed. Samples were handled with standard laboratory chain-of-custody procedures. Sample canisters and flow controllers were cleaned and blanked using method TO-12 for total non-methane hydrocarbons prior to field deployment. All of the samples were successfully collected and analyzed for methane and the TO-15 target analytes. Quality control parameters of precision (repeatability) and spiking of surrogate compounds meet internal URS and project-required specifications.

The reliability of this data set can be characterized as good, based on the repeatability (analytical precision), surrogate spike recoveries, blank levels and the relatively few number of unresolved interfering peaks in the sample chromatograms. The April 28, 2011 field blank canister reported no positive hits above the method detection limit other than the surrogate recoveries. The reported results have not been blank corrected in attached tables per our standard project procedure. The analytical laboratory instituted a change in the calculation of the sample specific reporting limit (RL) which raised the limit by a factor of 2X from the previous

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(historical) procedure. There was no change in the method detection limit (MDL), which by project standard specification is < 0.5 ppb_v for each analyte. All analytical values including those below the method detection limit are reported in the conservative fashion.

Table 3 is a tabular summary of the gas well samples with the primary analytes required for submission to EPA. This sample set included 3 new gas wells (GMW-1, GMW-2 and GMW-3) for the first time. These three gas wells as well as the traditional G-1gas well were sampled for TO-15 analytes and methane. The primary analytes were within normal (historical) parameters. The level of methane within wells G-2 and GWM-3 were elevated over typical ambient concentrations. Following field sample canister collection, Well G-1 was sampled with a GA-90 analyzer to test for the continued presence of methane in the well. Methane was not detected in Well G-1 or the vicinity of the well above ambient background by the screening instrumentation.

URS appreciates the opportunity to assist your staff with this project. Please advise me at (919) 461-1242 if you have any questions.

Sincerely,

Robert F. Jongleux
Project Manager

Enclosure

cc: Chris Davis, URS/LOU
Project File/Task 49
Tony Marconi - LMSD
Carolyn Williams - LMSD

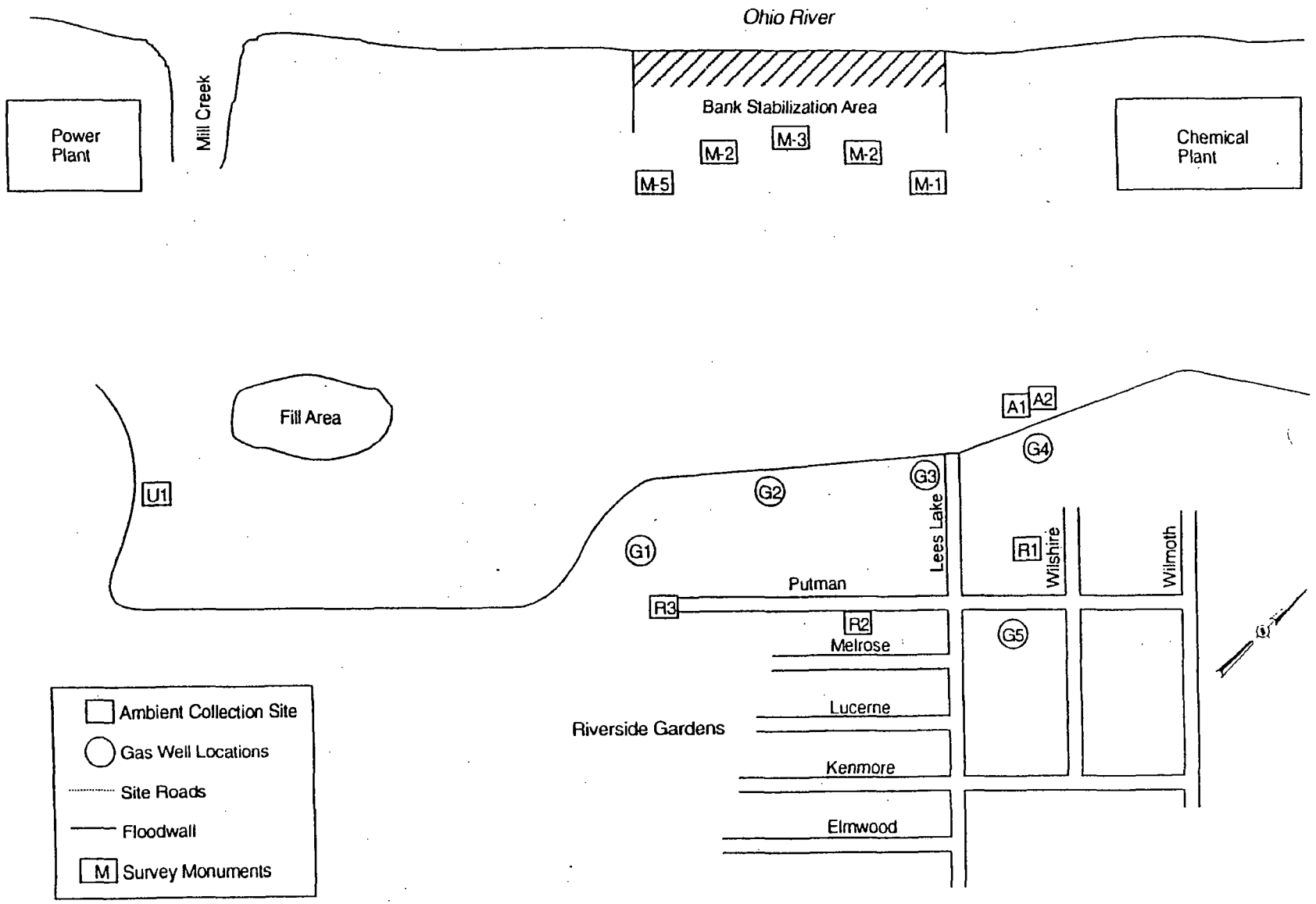

Figure 1. Lees Lane Landfill Sampling Locations

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TABLE 1

TO-15 DATA SUMMARY FOR AMBIENT
AIR SAMPLES AT THE LEE'S LANE LANDFILL
SAMPLING DATE: 28 APRIL 2011

	Ambient Air Samples					
Sample ID	A1	A2	U1	R1	R2	R3
Canister ID	5464	RA0898	HL0935	RA2030	RA2109	RA2253
Dilution Factor	4.4148	6.1102	5.7364	4.3558	6.2936	5.5874
Location	ONSITE	ONSITE DUP.	LG&E	4423 WILSHIRE	PUTNAM LANE	PUTNAM END
Veriflow ID	A181861	A168513	A218997	A134120	A218796	A181856
Compound (ppbV)						
Benzene	0.0905	0.0855	0.0665	0.107	0.0818	0.0704
Methylene chloride	0.0724	0.0819	0.0774	0.0675	0.0592	0.0654
Toluene	0.0561	0.0953	0.0769	0.116	0.108	0.0536
Vinyl chloride	ND	ND	ND	ND	ND	ND
Xylene (Total)	ND	ND	ND	0.0649	ND	ND
Methane (ppmV)	6.17	5.94	5.65	5.41	6.11	5.42

ND = Non Detect

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Table 2

LOCAL METEOROLOGICAL DATA
AMBIENT AIR SAMPLES
SAMPLING DATE: 28 APRIL 2011

Time	Barometric Pressure (in Hg)	Temperature (°F)	Dewpoint (°F)	Wind Direction (from)	Wind Speed (mph)	Observation
7:56 AM	29.86R	48.9	41	SW	12.7	MST CLOUDY
8:56 AM	29.88R	51.1	42.1	SSW	9.2	MST CLOUDY
9:56 AM	29.88R	55.9	43	SW	8.1	SCT CLOUDS
10:56 AM	29.88R	57.9	43	SW	16.1	MST CLOUDY
11:56 AM	29.88R	62.1	45	SW	17.3	SCT CLOUDS
12:56 PM	29.88R	64	46	SW	17.3	SCT CLOUDS
1:56 PM	29.87F	66	46	WSW	18.4	MST CLOUDY
2:56 PM	29.86F	68	43	WSW	23	MST CLOUDY
3:56 PM	29.86F	66	41	WSW	17.3	MST CLOUDY
4:56 PM	29.83F	68	43	WSW	20.7	MST CLOUDY
5:56 PM	29.84r	66	42.1	WSW	15	MST CLOUDY

Source: National Weather Service, Louisville, Ky.

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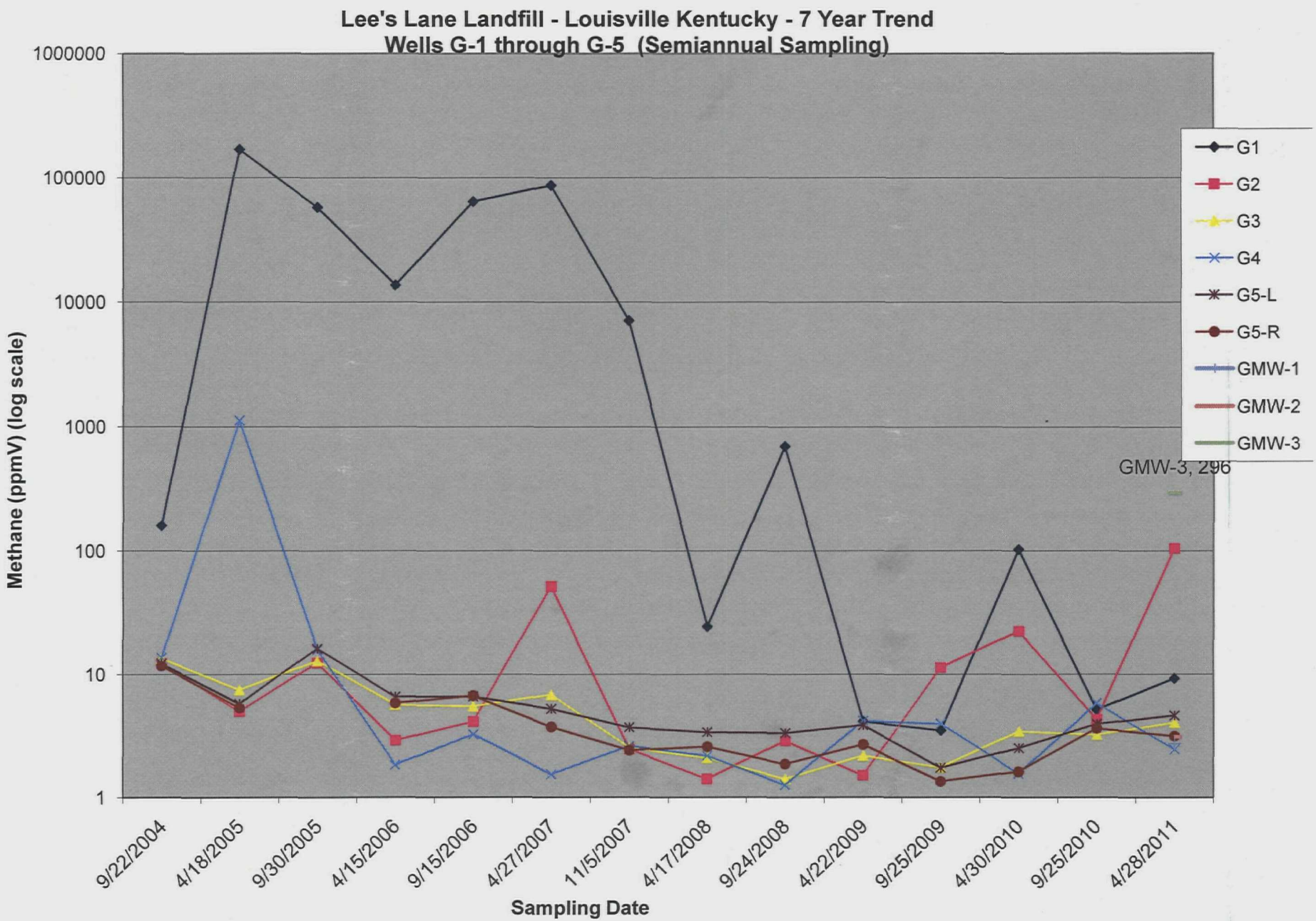
TABLE 3

TO-15 DATA SUMMARY FOR GAS MONITORING
SAMPLING DATE: 28 APRIL 2011

	Well Samples									
	G1	G2	G3	G4	G5-L	G5-R	GMW-1	GMW-2	GMW-3	BLANK #1
Canister ID	RA2029	RA2035	RA2028	RA2032	RA2115	5412	HL029	RA2211	RA2339	RA0893
Dilution Factor	4.3376	4.2486	4.2896	4.3376	4.3442	4.2896	4.6348	4.446	4.3842	2
Orifice	RA2029	RA2035	RA2028	RA2032	RA2027	5412	HL029	RA2211	RA2339	NA
Sampling Date	4/28/2011	4/28/2011	4/28/2011	4/28/2011	4/28/2011	4/28/2011	4/28/2011	4/28/2011	4/28/2011	4/28/2011
Compound (ppbV)										
Benzene	0.524	0.0506	0.0643	0.0282	0.0634	0.0283	0.298	0.134	0.152	ND
Methylene chloride	0.0685	0.0603	0.0532	ND	0.0491	0.0167	0.0565	ND	ND	ND
Toluene	0.455	0.0582	0.102	0.121	0.0586	0.0811	0.212	0.162	0.124	0.0096
Vinyl chloride	1.87	ND	0.128	0.0455	ND	ND	ND	ND	ND	ND
Xylene (Total)	0.323	ND	0.0137	ND	ND	ND	0.421	0.116	0.14	ND
Methane (ppmV)	9.28	105	4.07	2.47	4.67	3.17	2.76	3.12	296	0.854

ND = Non-Detect



G-1 through G-5 Semiannual